zones are defined in §73.205. Allotted station classes are indicated in the Table of Allotments, §73.202. Class A, B1 and B stations may be authorized in Zones I and I-A, Class A, C3, C2, C1, and C stations may be authorized in Zone II.

- (b) The power and antenna height requirements for each class are set forth in §73.211. If a station has an ERP and an antenna HAAT such that it cannot be classified using the maximum limits and minimum requirements in §73.211, its class shall be determined using the following procedure:
- (1) Determine the reference distance of the station using the procedure in paragraph (b)(1)(i) of §73.211. If this distance is less than or equal to 28 km, the station is Class A; otherwise,
- (2) For a station in Zone I or Zone I-A, except for Puerto Rico and the Virgin Islands:
- (i) If this distance is greater than 28 km and less than or equal to 39 km, the station is Class B1.
- (ii) If this distance is greater than $39\ km$ and less than or equal to $52\ km$, the station is Class B.
 - (3) For a station in Zone II:
- (i) If this distance is greater than $28\,$ km and less than or equal to $39\,$ km, the station is Class C3.
- (ii) If this distance is greater than 39 km and less than or equal to 52 km, the station is Class C2.
- (iii) If this distance is greater than 52 km and less than or equal to 72 km, the station is Class C1.
- (iv) If this distance is greater than 72 km and less than or equal to 92 km, the station is Class C.
- (4) For a station in Puerto Rico or the Virgin Islands:
- (i) If this distance is less than or equal to $42\ \text{km}$, the station is Class A.
- (ii) If this distance is greater than $42\,$ km and less than or equal to $46\,$ km, the station is Class B1.
- (iii) If this distance is greater then $46\,\mathrm{km}$ and less than or equal to $78\,\mathrm{km}$, the station is Class B.

[52 FR 37788, Oct. 9, 1987; 52 FR 39920, Oct. 26, 1987, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989]

§73.211 Power and antenna height requirements.

- (a) Minimum requirements. (1) Except as provided in paragraphs (a)(3) and (b)(2) of this section, FM stations must operate with a minimum effective radiated power (ERP) as follows:
- (i) The minimum ERP for Class A stations is $0.1\ kW$.
- (ii) The ERP for Class B1 stations must exceed 6 kW.
- (iii) The ERP for Class B stations must exceed 25 kW.
- (iv) The ERP for Class C3 stations must exceed 6 kW.
- (v) The ERP for Class C2 stations must exceed 25 kW.
- (vi) The ERP for Class C1 stations must exceed $50\ \mathrm{kW}.$
- (vii) The minimum ERP for Class C stations is $100\ \mathrm{kW}.$
- (2) Class C stations must have an antenna height above average terrain (HAAT) of at least 300 meters (984 feet). No minimum HAAT is specified for Classes A, B1, B, C3, C2, or C1 stations.
- (3) Stations of any class except Class A may have an ERP less than that specified in paragraph (a)(1) of this section, provided that the reference distance, determined in accordance with paragraph (b)(1)(i) of this section, exceeds the distance to the class contour for the next lower class. Class A stations may have an ERP less than 100 watts provided that the reference distance, determined in accordance with paragraph (b)(1)(i) of this section, equals or exceeds 6 kilometers.
- (b) Maximum limits. (1) Except for stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

| Station class | Maximum ERP | Reference HAAT in meters (ft.) | Class contour distance in kilo- meters |
|---------------|------------------|--------------------------------------|--|
| | 0134/ (7.0. 4013 | 400 (000) | 00 |
| Α | 6kW (7.8 dBk) | 100 (328) | 28 |
| B1 | 25kW (14.0 dBk) | 100 (328) | 39 |
| В | 50kW (17.0 dBk) | 150 (492) | 52 |
| C3 | 25kW (14.0 dBk) | 100 (328) | 39 |
| C2 | 50kW (17.0 dBk) | 150 (492) | 52 |
| C1 | 100kW (20.0 dBk) | 299 (981) | 72 |
| C | 100kW (20.0 dBk) | 600 (1968) | 92 |
| | | | |

(i) The reference distance of a station is obtained by finding the predicted distance to the 1 mV/m contour using

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Figure 1 of §73.333 and then rounding to the nearest kilometer. Antenna HAAT is determined using the procedure in §73.313. If the HAAT so determined is less than 30 meters (100 feet), a HAAT of 30 meters must be used when finding the predicted distance to the 1 mV/m contour.

(ii) If a station's ERP is equal to the maximum for its class, its antenna HAAT must not exceed the reference HAAT, regardless of the reference distance. For example, a Class A station operating with 6 kW ERP may have an antenna HAAT of 100 meters, but not 101 meters, even though the reference distance is 28 km in both cases.

(iii) Except as provided in paragraph (b)(3) of this section, no station will be authorized in Zone I or I-A with an ERP equal to 50 kW and a HAAT exceeding 150 meters. No station will be authorized in Zone II with an ERP equal to 100 kW and a HAAT exceeding 600 meters.

(2) If a station has an antenna HAAT greater than the reference HAAT for its class, its ERP must be lower than the class maximum such that the reference distance does not exceed the class contour distance. If the antenna HAAT is so great that the station's ERP must be lower than the minimum ERP for its class (specified in paragraphs (a)(1) and (a)(3) of this section), that lower ERP will become the minimum for that station.

(3) For stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

| Station class | Maximum ERP | Reference HAAT in meters (ft.) | Class contour distance in kilo- meters | | |
|---------------|---|--------------------------------------|--|--|--|
| A B1 B | 6kW (7.8 dBk) 25kW (14.0 dBk) 50kW (17.0 dBk) | 240 (787) 150 (492) 472 (1549) | 42 46 78 | | |

(c) Existing stations. Stations authorized prior to March 1, 1984 that do not conform to the requirements of this section may continue to operate as authorized. Stations operating with facilities in excess of those specified in paragraph (b) of this section may not increase their effective radiated powers

or extend their 1 mV/m field strength contour beyond the location permitted by their present authorizations. The provisions of this section will not apply to applications to increase facilities for those stations operating with less than the minimum power specified in paragraph (a) of this section.

[53 FR 17042, May 13, 1988, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989]

§73.212 Administrative changes in authorizations.

(a) In the issuance of FM broadcast station authorizations, the Commission will specify the transmitter output power and effective radiated power in accordance with the following tabulation:

| . 10 0 | F | Rounded out to nearest figure (watts or kW) |
|--------------|----------------|--|
| 3 to 10 | 1 to 3 | c |
| | 3 to 10 | |
| 10 to 30 | 10 to 30 | |
| 30 to 100 | | |
| 100 to 300 | 100 to 300 | |
| 300 to 1,000 | 300 to 1,000 . | 1 |

(b) Antenna heights above average terrain will be rounded out to the nearest meter.

[28 FR 13623, Dec. 14, 1963, as amended at 48 FR 29506, June 27, 1983]

§ 73.213 Grandfathered short-spaced stations.

(a) Stations at locations authorized prior to November 16, 1964 that did not meet the separation distances required by §73.207 and have remained shortspaced since that time may be modified or relocated provided that the predicted distance to the 1 mV/m field strength contour is not extended toward the 1 mV/m field strength contour of any short-spaced station. Mutual increase in the facilities of such stations up to the limits set forth in §73.211 may be permitted pursuant to an agreement between the affected stations and a showing of public interest. See § 73.4235.

(b) Stations at locations authorized prior to May 17, 1989, that did not meet the IF separation distances required by